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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/818,089

03/26/2001

Jim Stockdale

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06/01/2004

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EXAMINER

BROCKETTI, JULIE K

ART UNIT

PAPER NUMBER

3713

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,089

Applicant(s)

STOCKDALE, JIM

Examiner

Julie K Brockett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4, 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 6,488,581. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims disclose a mass storage data protection system with various hardware pieces in the same position, performing the same functions.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 6, 8 and 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2, 6, 8 and 12 state "status register being configured to at least partially control functioning..." The terms "at least partially" renders the claims indefinite. It is not clear as to the amount of control that the status register has, nor what part of the invention it does control.

Claims 13 and 14 are indefinite since they are directed towards an apparatus or a medium and then later in the claims become dependent on a system of a previous independent claim. The applicant must include all of the limitations of claim 7 into claim 13 and cannot just refer to them using the phrase "in accordance with claim 7". This is confusing and it is not understood if these claims are meant to be dependent or are independent claims.

Furthermore, the phrase "in accordance with claim 7" renders the claim indefinite since it is not clear what limitations are to be "in accordance with". One claim is a machine and the other is a system and it is not clear as to how they are being combined to form one independent claim.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugai, U.S. Patent No. 5,564,036. in view of Ciciora, U.S. Patent No. 4,091,418. Sugai discloses a mass storage data protection system comprising the following: a mass storage device command latch, a comparator and a comparator command register in communication with the comparator. The comparator command register includes commands that generate a fault within the mass storage data protection system. When the comparator receives a command from the mass storage device command latch corresponding to a command within the comparator command register, a fault is generated within the mass storage command latch. The comparator command register comprises a fixed command array. It would have been obvious to also include a user command array in order to protect areas of memory the user wishes not to be accessed (See Sugai Figs. 1 & 2, col. 2 lines 23-40).

Sugai lacks in disclosing a timing circuit comprising a synchronizer and a reset generator. Ciciora teaches of an automatic channel equalization system in which a timing circuit comprises a synchronizer with a reset output (See

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Ciciora column 8 lines 26-31). It would have been obvious at the time the invention was made to use a timing circuit with a synchronizer and a reset generator as the timing means of the protection system of Sugai. It is well known throughout the art that timing circuits can be made in many different ways out of a variety of components and are useful in circuit design in order to regulate the inputs and outputs of various circuit components at critical times.

Claims 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugai in view of Ciciora and further in view of Browne, U.S. Patent No. 6,272,533 B1. Sugai and Ciciora lack in disclosing a control and status register in communication with the comparator command register and the comparator. Browne teaches of a controller, i.e. a control and status register in communication with allowing a write command to a hard drive. The control and status registers are configured to at least partially control functioning of the mass storage data protection system (See Browne Fig. 2 & 4A; col. 8 lines 43-45). It would have been obvious to one at the time the invention was made to include status and control registers into the invention of Sugai so that the operation of the system can be monitored at all times. Browne further discloses a mass storage device system that uses intelligent drive electronics (See Browne Fig. 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an intelligent drive electronics hard disk drive and an intelligent drive electronics

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command latch. IDE devices are well known throughout the art. IDEs have the drive controller integrated into the drive electronics resulting in an "intelligent" drive. This is advantageous since the physical geometry of the disk can be "hidden" while the computer can see a geometry that the operating system can use.

Claims 7, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugai in view of Ciciora in further view of Brunner et al., U.S. Patent No. 4,727,544. Sugai et al discloses all of the limitations of the aforementioned claims except for being incorporated in a gaming machine. Brunner et al. teaches of a system for continuously checking the integrity of the memories of a computer controlled gaming device. The gaming device includes a housing, user input buttons attached to the housing, a display attached to the housing, and a processor for implementing operating software to control the gaming device (See Brunner et al. column 1 lines 36-46 & Figure 1). The gaming machine's operating software has a gaming mode and a maintenance mode. The software suspends gaming operation when the system has been written too and the game is not in the maintenance mode (See Brunner col.. 3 lines 25-65). It would have been obvious at the time the invention was made to place the protection system of Sugai. into the gaming machine of Brunner et al. Both Brunner's and Sugai's inventions provide the same purpose of protecting the memory of a system. Sugai's invention can be

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used wherever there is memory to be protected. Today, most gaming machines have internal memory that needs to be protected. Therefore, it is obvious to use Sugai's protection system to prevent unauthorized access into Brunner's gaming machine. Unauthorized memory access can lead to malfunctions of the machine and cheating by players.

Claims 8, 10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugai in view of Ciciora in view of Brunner et al. in further view of Browne, U.S. Patent No. 5,564,036. Sugai, Ciciora and Brunner lack in disclosing a control and status register in communication with the comparator command register and the comparator. Browne teaches of a controller, i.e. a control and status register in communication with allowing a write command to a hard drive. The control and status registers are configured to at least partially control functioning of the mass storage data protection system (See Browne Fig. 2 & 4A; col. 8 lines 43-45). It would have been obvious to one at the time the invention was made to include status and control registers into the invention of Sugai so that the operation of the system can be monitored at all times. Browne further discloses a mass storage device system that uses intelligent drive electronics (See Browne Fig. 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an intelligent drive electronics hard disk drive and an intelligent drive electronics command latch. IDE devices are well known throughout the art. IDEs have

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the drive controller integrated into the drive electronics resulting in an "intelligent" drive. This is advantageous since the physical geometry of the disk can be "hidden" while the computer can see a geometry that the operating system can use. Browne further discloses a write enable switch in communication with the comparator (See Browne col. 8 lines 55-62). It would have been obvious to one of ordinary skill in the art to include a write enable switch which is configured to suppress generation of a fault within the mass storage command latch when the enable switch is closed so that users may write to the hard drive when needed.

Citation of Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Hung et al., U.S. Patent No. 5,268,960.

--Hung discloses a write protection device for a computer hard drive with a write enable switch.

2. Elliott et al., U.S. Patent No. 5,559,993.

--Elliott et al. discloses a hardware circuit for securing a computer against undesired write commands.

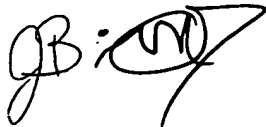
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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie K Brockett whose telephone number is 703-308-7306. The examiner can normally be reached on M-Th 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg SPE can be reached on 703-308-1327. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).




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